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09/675,264	09/28/2000	Nobuyoshi Morimoto	5596-00500	1006

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EXAMINER
FUREMAN, JARED

ART UNIT	PAPER NUMBER
2876	

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/675,264	Applicant(s) MORIMOTO, NOBUYOSHI
	Examiner Jared J. Fureman	Art Unit 2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 March 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *37-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *37-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 September 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Receipt is acknowledged of the IDS, filed on 1/10/2003, the change of address and the amendment, filed on 3/18/2003, all of which have been entered in the file. Claims 37-49 are pending.

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 37-45 been renumbered 41-49 (claims 1-40 were originally filed and claims 1-36 were cancelled by the amendment filed on 3/18/2003).

2. Claims 37-40, 45, 46, and 49 are objected to because of the following informalities:

Claims 37-40 are objected to as being incomplete, since claim 37 depends from cancelled claim 33 and claims 38-40 depend, either directly or indirectly, from claim 37. For examination purposes, claim 37 has been interpreted so as to include the limitations of cancelled claim 33.

Claim 45, line 2: "each" should be replaced with --a--, in order to avoid a lack of proper antecedent basis for "each carrier memory device".

Claim 46, line 2: "each" should be replaced with --a--, in order to avoid a lack of proper antecedent basis for "each carrier memory device".

Claim 49 is objected to as being incomplete, since claim 49 depends from cancelled claim 6. Since claim 49 is a method claim and claim 6 was an apparatus claim, it appears as though claim 49 depending from claim 6 was a typographical error. Thus, for examination purposes, claim 49 has been interpreted so as to depend from claim 41.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woolley et al (US 5,804,810, previously cited) in view of Harris et al (US 5,466,030, previously cited).

Woolley et al teaches carrier (for example: railway car or truck 12_6) for shipping items, wherein the carrier comprises: a plurality of storage locations each configured to store a container (as shown in figures 5 and 6 the railway car and truck have a plurality of storage locations for storing containers 12_1), wherein each container includes a container memory device (memory 104 of asset tag 16_1), a carrier memory device configured to store destination information about the carrier (memory 104 of asset tag 16_6), wherein the carrier memory device allows read-write access to the stored destination information; wherein the carrier further comprises an interface

(communications circuitry 102 of asset tag 16_6), a processor (microprocessor 100 of asset tag 16_6) and a power supply (power 110 of asset tag 16_6) each coupled to the carrier memory device; wherein the processor is configured to upload information stored in the carrier memory device to a network (operations center 13) via the interface; a temperature/environment sensor (18_1, 18_2, etc.), wherein the processor is configured to periodically store temperature/environmental data from the temperature/environment sensor into the carrier memory device, wherein the upload information includes at least part of the temperature/environmental data (see figures 1-3, 5, 6, 8, 11, column 1 line 54 - column 2 line 11, column 4 lines 6-19, 40-53, column 4 line 66 - column 5 line 16, column 13 lines 5-12, column 16 lines 8-67, column 17 lines 3-15, column 17 line 44 - column 19 line 31, column 19 line 57 - column 20 line 58, column 21 line 26 - column 22 line 4, column 25 line 15 - column 26 line 30, column 30 lines 37-43, column 57 lines 36-52, column 62 line 64 - column 64 line 29).

Woolley et al fails to specifically teach each storage location being configured to permit a container stored therein to be removed without removing other storage containers stored in other storage locations.

Harris et al teaches a carrier (vehicle 10) including a plurality of storage locations (on deck 18) each configured to store a container (cargo), each storage location being configured to permit a container stored therein to be removed without removing other storage containers stored in other storage locations (vehicle is configured to be side-loaded, thereby allowing individual loading/unloading of cargo without the need to

disturb the remaining cargo on the deck) (see figures 1, 2, column 1 lines 5-20, 40-50, column 4 lines 45-53, and column 7 lines 3-10).

In view of Harris et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Woolley et al, each storage location being configured to permit a container stored therein to be removed without removing other storage containers stored in other storage locations, in order to permit individual access to each container thereby increasing the convenience and efficiency of the system.

5. Claims 41-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woolley et al in view of Lubenow et al (US 5,715,398).

Woolley et al teaches a method, comprising: routinely transporting a plurality of standard carriers (ships 62 and railway cars or trucks 12_6 each representing a standard carrier) on a plurality of shipping routes (the routes of the ships and trucks), wherein each standard carrier stores containers (12_1) and wherein said routinely transporting includes transferring a container from a carrier of the plurality of standard carriers to another carrier of the plurality of standard carriers (transferring a container from a ship to a railway car or truck, for example) in response to data (a planned route/waypoints) stored in a container memory device (memory 104 of asset tag 16_1) attached to the container; receiving a shipment including a plurality of containers (for example, the ship delivers a plurality of containers to a holding area 64) for transport from an origination (the object/containers shipper) to a destination (the destination of the object/container); storing data indicative of the destination in each container memory device attached to

one of the plurality of containers (the planned route, waypoints and destination are stored in the memory 104 of each asset tag 16_1); wherein the storing comprises storing a unique container identifier (a unique identification for the object, a description of the object), data indicative of the origination (the object/containers shipper), and data indicative of one or more intermediate destinations (waypoints) along the one of the plurality of shipping routes in each container memory device (memory 104 of asset tag 16_1) attached to one of the containers included in the plurality of containers; uploading data stored in one or more container memory devices attached to containers included in one or more of the plurality of standard carriers to a server (operations center 13) via a network (a network of tags 16); periodically sensing a temperature/environmental condition (via sensors 18_1, 18_2, etc.) and storing data indicative of the temperature/environmental condition in a container memory device (memory 104 of asset tag 16_6) attached to one of the plurality of containers; storing data indicative of a respective one of the shipping routes in a carrier memory device (memory 104 of asset tag 16_6) attached to one of the plurality of standard carriers; storing data indicative of which of the plurality of containers are stored in the one of the plurality of standard carriers in a carrier memory device (memory 104 of asset tag 16_6) attached to one of the plurality of standard carriers (the asset tag 16_6 stores the unique identification/description of the containers 12_1); updating the data indicative of which of the plurality of containers are stored in the one of the plurality of standard carriers in response to transferring one of the plurality of containers to a different one of the plurality of standard carriers (after containers 12_1 are loaded into a carrier 12_6 the asset

tag 16_1 will communicate with the asset tag 16_6); updating data stored in each container memory device attached to one of the plurality of containers in response to the one of the plurality of standard carriers being received at a hub along the one of the plurality of shipping routes (for example, a GPS sensor (one of sensors 18) will update the location of the containers and asset tags) (see figures 1-3, 5-8, 11, column 1 line 54 - column 2 line 11, column 4 lines 6-19, 40-53, column 4 line 66 - column 5 line 16, column 13 lines 5-12, column 16 lines 8-67, column 17 lines 3-15, column 17 line 44 - column 19 line 31, column 19 line 57 - column 20 line 58, column 21 line 26 - column 22 line 4, column 25 line 15 - column 26 line 30, column 30 lines 37-43, column 52 line 60 - column 53 line 32, column 57 lines 36-52, column 59 lines 19-22, column 62 line 64 - column 64 line 29).

Woolley et al fails to specifically teach if shipping different portions of the shipment over different ones of the plurality of shipping routes costs less than shipping all of the shipment over a same one of the plurality of shipping routes, placing a portion of the plurality of containers in one of the plurality of standard carriers to be transported on one of the plurality of shipping routes and placing another portion of the plurality of containers in another one of the plurality of standard carriers to be transported on a different one of the plurality of shipping routes.

Lubenow et al teaches a method, comprising: transporting a plurality of items (books, for example) on a plurality of shipping routes, wherein the transporting includes transferring items from a carrier to another carrier (transferring books from a truck to the U.S. Postal Service, for example); receiving a shipment including a plurality of items for

transport from an origination to a destination; if shipping different portions of the shipment over different ones of the plurality of shipping routes costs less than shipping all of the shipment over a same one of the plurality of shipping routes, placing a portion of the plurality of containers in one of the plurality of standard carriers to be transported on one of the plurality of shipping routes and placing another portion of the plurality of containers in another one of the plurality of standard carriers to be transported on a different one of the plurality of shipping routes (for example, rather than sending a partially loaded truck to a specific entry point, the surplus is reassigned to different entry points, so as to maximize the load of each truck) (see figures 2, 6F, column 3 lines 15-50, column 4 lines 31-48, column 11 line 50 - column 12 line 15, and column 17 lines 6-13).

In view of Lubenow et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the method as taught by Woolley et al, if shipping different portions of the shipment over different ones of the plurality of shipping routes costs less than shipping all of the shipment over a same one of the plurality of shipping routes, placing a portion of the plurality of containers in one of the plurality of standard carriers to be transported on one of the plurality of shipping routes and placing another portion of the plurality of containers in another one of the plurality of standard carriers to be transported on a different one of the plurality of shipping routes, in order to utilize the most efficient and cost effective distribution plan.

Response to Arguments

6. Applicant's arguments with respect to claims 41-49 have been considered but are moot in view of the new ground(s) of rejection.

As discussed above, Lubenow et al teaches utilizing the most cost effective distribution plan, including the reassignment of a surplus of items from one entry point to other entry points, that is, rather than sending the total surplus to a single entry point using a partially loaded truck, the surplus is divided and reassigned by being added to trucks traveling to other entry points.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brockwell et al (US 5,063,506) teaches a system and method for estimating the most cost effective delivery of parts. Kashiwase (JP 5-242106 A) teaches a method for reducing distribution cost by determining a distribution route.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (703) 305-0424. The examiner can normally be reached on 7:00 am - 4:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jared J. Fureman
Art Unit 2876

June 15, 2003